BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

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ALLOWABLE EX PARTE BRIEFING

REQUESTED BY SOUTH CAROLINA ELECTRIC & GAS COMPANY - 2010 Integrated Resource Plan

TRANSCRIPT OF PROCEEDINGS

COMMISSIONERS PRESENT: Elizabeth B. 'Lib' FLEMING, *CHAIRMAN,* John E. "Butch" HOWARD, *VICE CHAIRMAN*; and COMMISSIONERS David A. WRIGHT, G. O'Neal HAMILTON, Randy MITCHELL, and Swain E. WHITFIELD.

ADVISOR TO COMMISSION: Joseph Melchers, Esq.

STAFF: Jocelyn B. Boyd, Interim Chief Clerk/Administrator; F. David Butler, Jr., Senior Counsel; James Spearman, Ph.D., Executive Assistant to the Commissioners; B. Randall Dong, Esq., Legal Staff; Tom Ellison and Lynn Ballentine, Advisory Staff; Jo Elizabeth M. Wheat, CVR-CM-GNSC, Court Reporter; and Hope Adams and Deborah Easterling, Hearing Room Assistants.

APPEARANCES:

SHANNON BOWYER HUDSON, ESQUIRE, representing the SOUTH CAROLINA OFFICE OF REGULATORY STAFF

K. CHAD BURGESS, ESQUIRE, along with *ROBERT E. LONG AND JOSEPH M. LYNCH, Ph.D.,* presenters, representing SOUTH CAROLINA ELECTRIC & GAS COMPANY

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Please note: PowerPoint presentation attached hereto.

P R O C E E D I N G

CHAIRMAN FLEMING: Please be seated. This ex parte briefing will now come to order. At this time I'd like to ask Attorney Joseph Melchers for the reading of the docket.

MR. MELCHERS: Thank you, Madam Chairman, Commissioners. We are here this morning at the request of South Carolina Electric & Gas Company for an allowable ex parte briefing to be held today, April 14th, at 10:30 in the Commission's hearing room. And the subject matter being discussed at the briefing is South Carolina Electric & Gas Company's 2010 integrated resource plan. Thank you.

CHAIRMAN FLEMING: Thank you. Who represents South Carolina Electric & Gas Company?

MR. BURGESS: Good morning, Madam Chairman and members of the Commission. My name is Chad Burgess, and I represent the South Carolina Electric & Gas Company. It's our pleasure to appear before you today and present to the Commission our IRP. We envision this process as being an open dialogue, an open conversation with the Commission. And I brought with me today two of our resident experts on our IRP, and namely, Mr.

Robert Long and Joseph Lynch.

CHAIRMAN FLEMING: Well, we're happy to have you here, and to have both of you here today, as well. Looking forward to what you have to say and asking you some good questions, hopefully.

And who represents the Office Of Regulatory Staff?

MS. HUDSON: Good morning, Madam Chairman, Vice Chairman, members of the Commission. My name is Shannon Bowyer Hudson. I'm here on behalf of the South Carolina Office of Regulatory Staff. Good morning.

CHAIRMAN FLEMING: Good morning, Ms. Hudson. Happy to have you here, as well.

Well, I guess at this time we'll just turn it over to you, Mr. Burgess.

MR. BURGESS: I'm not going to do a lot of talking today, Madam Chairman.

CHAIRMAN FLEMING: Just directing, huh?

MR. BURGESS: Absolutely. Like I said earlier, Bob Long and Dr. Lynch are here with us today. They're our in-house experts as it relates to the IRP. They are the gentlemen, along with members of their team back at the office, who forecast the needs of our customers, and our

customers have come to expect reliable, safe electric service from us, and we provide that on a daily basis, 24 hours day, seven days a week.

So without further ado, with your permission, I'll turn it over to these gentlemen and let them go through the presentation. Certainly, feel free to ask any questions as the presentation moves along. It's about 30 minutes in length. Or if you want to ask question at the end, it's totally your preference, and we'll answer any questions that you all have on your mind.

CHAIRMAN FLEMING: All right, very good.

DR. LYNCH: Good morning, Chairman Fleming.

CHAIRMAN FLEMING: Good morning.

DR. LYNCH: Commissioners. Let me say I appreciate the opportunity to talk about our IRP this morning, too.

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The objective of our IRP has three goals to it: to provide power reliably to our customers, to provide economically priced power, and to provide power that meets all the environmental regulations that we're subject to.

[Ref: PowerPoint Slide 3]

As you know, the IRP has to pull together

three parts: forecasts, demand-side management, and supply-side management.

[Ref: PowerPoint Slide 4]

I'm going to talk about the forecast and demand-side management parts of the IRP, and Bob Long will talk about the supply-side.

[Ref: PowerPoint Slide 5]

This chart comes out of our filed report. I think it's the most important chart in our IRP report, because this chart summarizes the whole IRP. It has the forecast, demand-side management, then the supply-side plan to meet that demand.

They shaded in the supply-side part of it, which is the bottom here, so I would know when to stop talking and move on to the next slide.

Line one there, "Baseline Trend," is the starting part of the forecast. Most of the work in producing the forecast goes into producing that baseline trend. All our statistical modeling, econometric modeling, all the economic data that we use to drive the forecast -- population, income, and that sort of thing -- all goes to produce that baseline trend number, and the result is we see growth there on baseline of about 120 megawatts per year, and that's consistent with the history that

we've seen.

Line two, "EE Impact," that's the energy efficiency impact that we are projecting. There's two components to energy efficiency: There's a component comprised of the portfolio of energy efficiency programs that SCE&G will present to its customers, I guess, subject to your approval -- if you recall, we had the hearing two weeks ago on the DSM programs -- and the other part of the impact are federal mandates, specifically, the mandated efficiency in lighting and also the efficiency in air-conditioning units where you go from a 10 to a 13 CEER. I believe that started in 2006, but it will have effects through the forecast.

The other thing to notice on line two at the energy efficiency impact, if you go out to something like 2019, you get upwards of 300 megawatts or so, so it's having a significant impact on our forecast and on our plans. And I guess I should add, the forecasting team has a lot more confidence in that first line, the baseline trend, than we do in our projections of energy efficiency impacts. The baseline trend, we're used to doing that, we have the history, we can correlate with statistical models, with the

economy, customer growth, and so forth. The energy efficiency is really something that's not in the past but projected in the future, so you can see the problem here.

The sum of lines one and two gives us three, the "Gross Territorial Peak." The next line, four, is "Demand Response." Those are demand-response programs. Used to be called load management, but it's really peak-clipping programs. For SCE&G, we have an interruptible load program and a standby generator program. You'll probably also notice this 210 megawatts, and we keep that constant through the planning horizon. I have another slide to address that point, but we believe in the short term and intermediate term, five to ten years, our system really can't handle more than that 210 megawatts. Beyond that, maybe more, but we'll have to see as we go forward.

Line five is the result of those components to get the "Net Territorial Peak." Line five [sic] is our "Firm Contract Sales," so we sell 250 megawatts to North Carolina, and that sale ends in 2012.

Putting it all together, you come to line seven, that's our "Total Firm Obligation." So our supply plan has to meet that firm obligation. We

build capacity, purchase capacity, what have you, to meet that load.

And as Chad said, I'm happy to answer questions whenever you have them, or at the end, or --

CHAIRMAN FLEMING: Well, we'll probably wait until the end of your presentation --

DR. LYNCH: Okay.

CHAIRMAN FLEMING: -- unless a Commissioner just as a burning question --

DR. LYNCH: Okay.

CHAIRMAN FLEMING: -- on a particular point.

[Ref: PowerPoint Slide 6]

DR. LYNCH: This is another chart taken out of our IRP report. And don't worry, I won't go into all the detail here. But I wanted to make a point, because, as you might expect, we've had to present the IRP to management -- there's been several meetings at the company -- and the question came up to me, suggesting that our forecasting team would take data points on graph paper and take a straightedge and just draw a straight line or something, to get that trend. So maybe "trend" is a bad word to use. But as I said before, most of our effort goes into producing that baseline trend,

and we break our sales base down into many different components: residential, commercial, industrial. Residential is broken down into single-family and multifamily. We break things down by rate, industrial class, two-digit SIC codes. So there's a lot of work. My forecasting guys say there's about 100 different series that are projected -- I don't know if it's 100; maybe it's only 80, but there's a lot. I mean, there's a lot of effort going into it.

This is the short-term forecasting group, so short term is two years, by month. Beyond the two years, we go annually and we collapse the rates, so you're only looking at the classes and the two-digit SIC codes, and so forth.

Two points. One point to make about this is our sales forecast drives the revenue forecast for the company, too, and the budgeting process, so we can't be optimistic in our forecast, because of the problems that would cause to running the company. We can't be pessimistic, either. We can't sandbag, because it affects the budget so greatly. So there's a lot of pressure to be right, and that's our goal and why we go through all this process. The other thing I should say, too, is our

techniques, the statistical and econometric and so forth, are pretty standard in the industry. I think most large utilities do it the same way as we do, or very similar.

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This is a graph of the year-by-year change in retail sales, going back about 30 years or so. The yellow is the approximate timing of recessions that we've seen, the blue line is the year-by-year change, the red line is the zero point. So any blue above the red indicates a year of growth. And the point here is that when you look over those 30 years, most of that blue is above the red line, so we've been growing through these recessions, year after year, almost.

When you look at those instances where we fall below the red line, at least historically before 2009, it's always been a short drop and we come right back. So the point being, we have growth through recessions. 2009 was a little -- well, it's different. That sort of impacted us, the economy, other utilities, a little more drastically than other recessions. We do see -- we are planning on sort of a rebound and continued growth after this recession, but we're not expecting what

they call a V-shaped rebound. That's where the economists say you go down and come right back up, right after a recession. It's more of a U. So we figure it's going to take us two years to get back where we are -- where we were, and then continue to grow beyond that.

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To guide us in the forecasting and interpret the economic conditions, we rely on IHS Global Insights. That's an economic forecasting outfit. I think it's the biggest in the country, the most well known. So we rely on their forecast and help to interpret what they mean for our sales. I graphed a few things -- population, employment, and real income -- just to compare some South Carolina growth to the nation. Then it just says Columbia and Charleston will be growing faster than the United States, Columbia and Charleston being most of our business, 80, 90 percent of it, I believe. And it's just another indication that there should be growth in our service territory, going forward.

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Because of all the uncertainty, we felt the need -- and it's probably a wise thing to do anyway -- to do scenario planning, so we generated a high

and a low forecast, and that's included in our IRP report. I won't go into all the numbers, but maybe just to point out and explain, looking at the line "Residential," our base forecast shows 2.2 percent growth in sales; that's what we're expecting. The high scenario went up to 2.7 percent. So the forecasting team went in and looked at customer growth, assumed if it grew a little faster, average use a little faster growth, things of that sort, and this is sort of the resulting growth rate. The low scenario, similarly computed. We've got 1-1/2 percent.

Historically, pre-recession, we were growing at 2.7 percent. And one of the points to the chart is I'm hoping to prove that our base forecast at least is reasonable. Even the high forecast, we've seen that kind of growth, we've seen in the past, so that's not an unusual -- in fact, I think it's something I think we all hope for. The low, I'm not sure how reasonable that is. I guess you have to worry about that, but I'm leaning more towards the base forecast.

When you put all these growth rates together, this --

[Ref: PowerPoint Slide 10]

-- table shows the impact on firm peak demand. So in shade here are numbers essentially taken out of that first chart I showed you; that's our base forecast with firm demand. To the right of it is the high scenario. So it looks like, when you go out ten years, it's like plus 500, 600 megawatts, to get a high number. The low scenario, minus 500, minus -- seems a little bit balanced there. That wasn't the intention.

And so the result of these forecasts, that's included in the IRP and something that we'll keep looking at and worrying about. Hopefully as we go the next few years, some of this uncertainty will dissipate and we'll have a better feel for the future.

[Ref: PowerPoint Slide 11]

This chart shows the components of the DSM impact, so we have three components. The demand response is in blue, and you can see there's 210 megawatts, is what it represents, constant out the planning horizon. In red, I have the SCE&G energy efficiency programs stacked on top of that. And so we grew those out, and we actually grew it out ten years and then held it flat beyond that. And really the reason was, is just that the energy

efficiency impact was getting so great, it became hard for us to believe it. But when Bob Long talks about our supply plan, there's a lot of flexibility, so we will be able to deal with a greater impact or a lesser impact from the supply side, so it's not too much of a worry. The green, then, is the federal mandates, and we add that on top. In total you're above 500 megawatts when you get out to 2019 or so.

[Ref: PowerPoint Slide 12]

Now, I want to talk about the demand response being constant, 210 megawatts, through the history -- or, through the forecast, the planning horizon. You can see there in red, SCE&G has about 4.2 percent of demand response, 4.2 percent of the peak demand. So if you take that 210 megawatts, divide by a peak of 5,000 megawatts, about, you get the 4.2 percent. And if you look below SCE&G and look at SERC-Southern, and here's SERC down below, is 3.3 percent. So down in the Southeast, I think we compare very well to other areas in the Southeast. The other thing to keep in mind is that reserve margin has a lot to do with how much demand response you can put in your plan. So if you take Florida, for example, the biggest -- they've got

7.7 percent -- in 2010 where this data is coming from, it's the forecast for 2010 that comes out of NERC, Florida has a 25 percent reserve margin in that -- or, they're planning on that. And there's a mandate in Florida to have a minimum of 20 percent, and I'm sure that if SCE&G had a requirement for a 20 percent reserve margin, we would add more demand response, too. We wouldn't make that up just with generating plants.

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This is my last slide, and I just want to point out a couple of key points that hopefully I made, but I want you to walk away with. So, one, SCE&G sales, we've grown through many recessions. We expect to keep growing.

Two, we have a lot of uncertainty today: The recession and how you grow out of it, all this energy efficiency, our programs and the government mandates, and conservation in general.

Three, SCE&G uses the same techniques as other utilities in the industry. We're on par with everyone.

Four, we get our projections of the economy from Global Insights, one of the better-known economic forecasting houses.

Five, we have a broad portfolio of energy efficiency programs that are going to -- we expect to impact the demand forecast.

And my last point, that SCE&G has a level of peak-shaving, demand-response capability that is comparable to others in the industry.

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With that, that's mine. I can sit down and let Bob go through the supply side, if that --

CHAIRMAN FLEMING: Well, let me see if there are any questions for you, Dr. Lynch, before we proceed. Are there -- all right, Commissioner Howard.

VICE CHAIRMAN HOWARD: Good morning, Dr. Lynch.

DR. LYNCH: Good morning, Commissioner.

VICE CHAIRMAN HOWARD: Going back to your -- I think your second or third slide, the one that had the chart on it with the green bottom?

DR. LYNCH: Oh, the green bottom?

VICE CHAIRMAN HOWARD: Yeah, the one that had -- Slide No. 5.

DR. LYNCH: This one?

[Ref: PowerPoint Slide 5]

VICE CHAIRMAN HOWARD: Yeah. What is the use

of capacity margin, and how do you use -- we understand reserve margin; we hear it all the time.

DR. LYNCH: Yeah.

VICE CHAIRMAN HOWARD: But we very seldom hear "capacity margin," and why is it there and what's it used for?

DR. LYNCH: Yeah. Well, and we put formulas down here, but -- and I guess I'm saving Bob some effort.

VICE CHAIRMAN HOWARD: Well, I'll wait for him.

DR. LYNCH: No, I'll do it. The two things measure the exact same thing. You take the margin and for the reserve you divide it by the firm peak demand. For the capacity margin, you take that margin capacity and divide by the supply side. So they measure the same thing. The important point is to make sure you're consistent when you talk about it, comparing from other utilities or through the industry. I think the industry standard is reserve margin. That's been my experience over the history. We put it in there because you see it different places, you know, so we put both there more for convenience, but we always talk reserve margin. Does that --

VICE CHAIRMAN HOWARD: Yeah. I was just curious, because you never see -- you hear "reserve margin" all the time.

CHAIRMAN FLEMING: Are there any more questions? Yes, Commissioner Whitfield.

COMMISSIONER WHITFIELD: Thank you, Madam Chairman.

Dr. Lynch, while you have that same slide up, on your line six -- and I think this is also true in the high- and low-load scenarios, which were pages 31, 32, and 33 -- does that represent, or I guess I thought originally that might represent the Orangeburg wholesale load, but I think I heard you say a little bit ago that represented sales to North Carolina. Is that what you said?

DR. LYNCH: Yes. Yeah. So that's a contract we entered into when we built the Jasper Plant in 2004, and we had an opportunity to build a larger plant. Instead of two turbines -- a two-on-one scenario, two turbines with one steam turbine, two-on-one -- the engineers said if you build three-on-one, that extra capacity would be really cheap, very inexpensive. So we went to the three-on-one and contracted with North Carolina to make that sale. And, of course, when it drops off now, that

capacity would be free for our system.

COMMISSIONER WHITFIELD: So that doesn't represent anything to do with Orangeburg or any other --

DR. LYNCH: No, no.

COMMISSIONER WHITFIELD: -- wholesale to municipalities in this State.

DR. LYNCH: No.

COMMISSIONER WHITFIELD: Okay, thank you, sir. That's all I have, Madam Chairman.

CHAIRMAN FLEMING: Are there any other -- yes, Commissioner Howard.

VICE CHAIRMAN HOWARD: I'm looking at slide number six, developing the baseline trend.

[Ref: PowerPoint Slide 6]

The last two items, I guess classed 92 and 97 --

DR. LYNCH: Yes.

VICE CHAIRMAN HOWARD: -- does that constitute most of your contract sales? I mean, is that most of your wholesale agreements?

DR. LYNCH: Those would be all the wholesale agreements in our control area, in our service territory. The other firm contract would be the one we were just talking about, the 250 to North

Carolina. Yeah, but that would be all our wholesale business. Now, there's some -- other sales would be non-firm, so it wouldn't be part of our plan.

VICE CHAIRMAN HOWARD: And I read that you have four municipal accounts.

DR. LYNCH: Yes. Yes.

VICE CHAIRMAN HOWARD: Okay, thank you. I was just curious. Thank you.

CHAIRMAN FLEMING: Any other --

DR. LYNCH: Can I --

CHAIRMAN FLEMING: -- questions?

DR. LYNCH: Can I correct something, just to make sure? Because I'm thinking four -- we probably, in this, have Greenwood. Up until the end of 2009, that was part of our territorial load, but they left, so this probably should've said three. Three municipal accounts.

VICE CHAIRMAN HOWARD: Okay.

CHAIRMAN FLEMING: All right. On slide seven, page seven --

DR. LYNCH: Yes.

[Ref: PowerPoint Slide 7]

CHAIRMAN FLEMING: -- on that blue line, where are you right at this point?

DR. LYNCH: Well, this was 2009.

CHAIRMAN FLEMING: Uh-huh. I'm saying, how much -- where are you today, at 2010?

DR. LYNCH: Oh, how have we grown the first couple months of 2010?

CHAIRMAN FLEMING: Yeah, I'd just like to know where you -- what the status is today, in retail sales.

DR. LYNCH: Oh.

CHAIRMAN FLEMING: You said that you were looking at taking a couple of years before you thought you would be --

DR. LYNCH: Back where we were, yeah.

CHAIRMAN FLEMING: Uh-huh. But you don't know where you are today.

DR. LYNCH: Well, because of the weather, we've increased sales a lot over the first -- you know, the winter was very cold. I know we're at about 1-1/2 percent growth this year over last, when you take the weather effect out. 1-1/2 percent, I'm trying to think --

CHAIRMAN FLEMING: Where would that be on the graph, can you say?

DR. LYNCH: Can I do that in my head? So you're in the neighborhood of 22,000 gigawatt-hours

a year. 1-1/2 percent would be 330, so figuring somewhere around -- if you annualized it, because we only have two months, but if that rate continued annually, I suppose it would be somewhere around here [indicating], about 400, 3-400 gigawatt-hours. And hopefully in the summer -- we'll pick up more -- you get more growth in the summer, too.

CHAIRMAN FLEMING: And what was the baseline for like 2009? I know you started the baseline trend at 2010. Or 2008, let's say 2008.

DR. LYNCH: Oh, what was the --

CHAIRMAN FLEMING: Before it dropped down.

DR. LYNCH: What was the actual number?

CHAIRMAN FLEMING: I don't have that. I just have for 2010, which is 4,972.

DR. LYNCH: I might have it -- there's a table in the IRP.

CHAIRMAN FLEMING: Well, I guess what I'm trying to understand, you had said that you thought it would be that, because of the economic downturn, it --

DR. LYNCH: Yeah.

CHAIRMAN FLEMING: -- was going to take awhile to get back up to the point you were.

DR. LYNCH: Yeah.

CHAIRMAN FLEMING: But on the baseline trend, it continues to grow, on page five --

DR. LYNCH: Yes, okay.

CHAIRMAN FLEMING: -- even though -- I'm just trying to figure out about how you did the forecast, even though the base -- it's supposed to not get back up for a couple of years.

DR. LYNCH: Yeah, oh, but it would -- so on that table, you only have forecast. So we'd say with 2010 we believe we'll be here [indicating], '11 here [indicating], and so it would grow there. But what this shows is that 2009 was sort of a -- this is the actual, an actual decline.

CHAIRMAN FLEMING: Uh-huh.

DR. LYNCH: And then in that table I'm showing the results of this point and this point [indicating], so from 2010, beyond, everything is positive, it's all growth --

CHAIRMAN FLEMING: Okay.

DR. LYNCH: -- which should be reflected in that table. And the reason I'm saying two years is because this drop here is close to 800 gigawatt-hours, and you see next year we're saying maybe 600, 6-700. The next point is about 500 --

CHAIRMAN FLEMING: In growth.

DR. LYNCH: -- in growth, so that gives me maybe 1,000, 1,100, in that range. So you can see it's going to take till 2011 to get all of this back.

CHAIRMAN FLEMING: Okay.

DR. LYNCH: That was sort of my point there.

CHAIRMAN FLEMING: All right. And the other question I had on that chart, the demand response, you said that the system couldn't handle any more.

DR. LYNCH: Yes.

CHAIRMAN FLEMING: But, yet, it could if we had a higher reserve margin, like Florida?

DR. LYNCH: Yes, that's what I was -- right.

CHAIRMAN FLEMING: Can you explain that?

DR. LYNCH: Yeah, what's the best way. Well, I guess what I see in the system is our reserve margin, the target is from 12 to 18 percent, and we kind of hug that 12 percent as the minimum. And so if we have demand response of 4 percent, that leaves 8 percent of capacity to generate on the system. And as you go throughout the year, if we have a lot of hot days in the summer, a lot of broad peaks, and we're thinking you can't rely on demand response for too many days out of the year. I mean, people just won't -- you know, wouldn't

sign up for it, or wouldn't deal with it. Plus, you have to follow the load through the year. So you need generating capacity, I'm thinking, not only in the summer, the peaking season, but throughout the year. And on our system, if you have 4 percent demand response, then we have -- Saluda's another 200 or so on megawatts that we try to hold back a little bit, for the water, the river and the lake. It's just a question of running the system. But if we go up to 20 percent, now we have to -- 20 percent of the system would be -- what is that, like 1,000 megawatts or so. 20 percent of -- yeah, 20 percent would be like 1,000 megawatts. In fact, I should probably go back.

[Ref: PowerPoint Slide 5]

So our reserves are around 600 megawatts; that gives us the 12 percent. If we go up to 1,000 megawatts, you say, well, where's that other 400 going to come from? And I'm saying we could add some more demand response to make up that 400. And we'd also add some more generating capacity, and then that would take us throughout the year. You wouldn't be so dependent on any one demand-response program to meet the load.

CHAIRMAN FLEMING: Although you are increasing

it, the reserve margin, is -- I guess you get more capacity.

DR. LYNCH: Oh, yeah, because the 12 percent as the load grows, and the capacity of 12 percent would -- 12 to 13 percent would keep it up, that way.

CHAIRMAN FLEMING: Okay. All right. Thank you.

COMMISSIONER HAMILTON: Madam Chair.

CHAIRMAN FLEMING: Commissioner Hamilton.

COMMISSIONER HAMILTON: Mr. Lynch, while you're still on this page, on the energy efficiency and renewables, what plan do you have for backup power for those?

DR. LYNCH: Well, for the energy efficiency, the hope is that that gets embedded into the customer's load. So if he puts insulation in the home, or high-efficiency lighting or motors, his load is down and you don't really have to back it up or worry about it. If we do have renewables, I guess you would have to worry -- I mean, for example, wind power, you would have to worry about how you back that up when the wind isn't blowing.

So I know other places that have wind -- in particular, like Texas, Arcot, they only consider 8

percent of the capacity as being firm. PJM had 15 percent. MISO, I think, had 8 percent, as well. So if you put 100 megawatts of wind, they say you really have eight megawatts of firm capacity for supply reserves, and so forth, meaning the other 92 percent would have to be backed up with peaking or something else. Maybe demand response.

COMMISSIONER HAMILTON: Okay. But at the present time, you aren't planning anything for renewables.

DR. LYNCH: No. I mean, we're looking at it, but nothing is planned right now.

COMMISSIONER HAMILTON: Thank you, sir.

CHAIRMAN FLEMING: All right. Any more questions?

[No response]

All right, thank you, Dr. Lynch. Mr. Long.

MR. LONG: Good morning, Commission Fleming --

CHAIRMAN FLEMING: Good morning.

MR. LONG: -- and Vice Chairman, and Commissioners.

Joe has established the firm obligation that we have, and I'm going to --

DR. LYNCH: Oh --

MR. LONG: That's all right.

[Ref: PowerPoint Slide 15]

So Joe has established our firm peak, and that grows over the 50-year forecast period that we have. The question is, how are we going to supply and meet that peak?

And if we look at the next decade, we have today 5,685 megawatts in our generation fleet, and we'll need to add new generation. And with adding that new generation in this next decade, it will give us the opportunity to remove some existing, aging coal generation, with some plants that we've indicated. The addition of new generation will be our two nuclear plants, 1,228 megawatts, and the opportunity to remove -- depending on how our plan evolves over this ten-year period -- the opportunity to remove maybe 300 megawatts of coal generation. The nearer term, the next five or six years, will be met -- any deficiencies will be met with short-term, year-to-year purchases.

Now, Joe has spoken --

[Ref: PowerPoint Slide 16]

-- about the reserve, so I'm going to page forward and then page back one. In planning we have to take into account many variables, some known, some unpredictable, unknown. The one we

know is we are part of a regional integrated grid that requires reliability, reliability of our system at all times, so we have an operating-reserve reliability and megawatts that are greater than just meeting our peak. We have to worry about plants that, when called on, may not operate at that moment, or there may be a forced outage of these plants. And in a similar way, where there is weather beyond what this normal weather forecast calls for, we have to stand ready to be able to deliver that energy.

So when we take that into consideration, we believe a 12 to 18 percent reserve margin is prudent in our planning.

[Ref: PowerPoint Slide 15]

Now, just to page back a moment, Joe has pointed, on line 15, the margin that we have with this supply plan that we have, and on line 16 is the calculation of the peak-demand reserve margin. That is the margin as a percent of our peak demand.

[Ref: PowerPoint Slide 17]

Forwarding two charts, I've drawn a curve. The lower curve, in yellow, represents the minimum 12 percent reserve over peak, and the parallel line in red represents an 18 percent reserve over our

peak. And in between those two curves is the ideal supply plan that we would have for our customers, given the 12 to 18 percent reserve margin. The straight line, beginning in 2009 and going to 2016, represents the megawatts we have in our fleet today, 5,685 megawatts. And where we fall below the curve, the minimum curve, we'll meet with short-term purchases, year-to-year purchases. That's over the next five or six years as we anticipate the addition of the new nuclear generation in 2016.

So we have a very flexible plan to have a chance to see how the energy efficiency programs develop, the participation in the programs, the megawatts that we can count on or have occur, and so over this next five- or six-year period, in anticipation of the nuclear, we have flexibility. And once we have the nuclear additions in 2016 and 2019, we also have opportunities to look at our coal fleet, our aging coal fleet, to see if removal of the plants that we've identified, or others, may be appropriate.

Out in the last five years of the 15 years, we have the additions of simple-cycle turbines. Now, that is so far out, we'll have a chance, I believe,

to talk with you again about how this plan evolves, but we could go back and look at plants that had been removed in terms of repowering, if needed, or at that same site placing the simple-cycle turbines. So a lot of flexibility in our plan.

[Ref: PowerPoint Slide 18]

This chart looks at our nameplate rating. This has our generation capacity. This does not represent the energy delivered, it represents the nameplate of our capacity. And as we are positioned today, we are fairly heavily weighted with coal and gas, but when we look out to 2019, a period when we have our two additions of nuclear generators, we have a very balanced portfolio, with nuclear representing 29 percent, and you can see the coal, 33 percent, and gas, 25 percent.

[Ref: PowerPoint Slide 19]

Now, when we deliver the energy to our customers, we talk in terms of the generation mix, how the energy is distributed, or how the plants deliver the energy. And this chart is intended to show that in today, or in 2009, 23 percent of our energy delivered was from non-emitting sources: nuclear, hydro, and a biomass unit located in the North Charleston area. After the addition of our

nuclear generators, we will have -- approaching 60 percent of the energy delivered to our customers will be non-emitting.

[Ref: PowerPoint Slide 20]

When I think of the opening objective statement that Joe mentioned -- economical, reliable, compliant -- I wanted to chart what some of the environmental standards or limits that we have to keep eyes on and have to work under. We have the Clean Air, and we have the Clean Air Interstate Rule, and these are limits that for our system become more stringent and -- or become more difficult to achieve over time. So I have charted our limits in terms of sulfur dioxide and nitrous oxide. And in the next chart --

[Ref: PowerPoint Slide 21]

-- I've layered over top of that the actual and projected emissions that we have. So when we look at the area of 2010, this period here [indicating], the limit drops down to 30,000 or so tons. That's not a precise number, but in the 30,000 range. And with the addition of our scrubbers at Williams and, later this year, the scrubber at Wateree, we are able to achieve below that limit in terms of the energy that we deliver,

and with the addition of the nuclear generation later in this decade, 2016 and 2019, those matters help us manage below the limits imposed upon us by the environmental compliance rules.

In a similar way, we have the nitrous oxide shown, in how we're able to manage below the limits.

[Ref: PowerPoint Slide 22]

Now there's a lot of debate and rules not yet certain about carbon. And rather than speculate what may happen, we have positioned ourselves with the non-emitting generators that are being added to our generation fleet that we will be -- we don't know exactly where the line will be drawn or how many allowances we'll be given or what the price per ton may be, but we feel confident and I feel assured that whatever it will be, we'll be better off with our fleet that we have by adding our nuclear generators.

So you can see here, by 2019, the dispatch of our system yields emissions of carbon less than we had in the mid-90s. So it's a very positive picture as we look out.

[Ref: PowerPoint Slide 23]

Now we talked a moment ago -- I think there

was a question about renewables and what are we doing or not. I should have mentioned just a moment ago that -- and drawn attention to the existing biomass unit we have down in the Charleston area. There's a co-generation facility now operated by Capstone, and we have a generator -- SCE&G has a generator there that utilizes the steam from that process. We have as much as 45 megawatts, but more importantly, translated into energy, 351,000 megawatt-hours last year that were generated from wood chips, black liquor, the other renewable resources at that site. And last year we had the Center for Resource Solutions take a look at the methodology by which we determine how many of those megawatt-hours are green, and we had those certified as green. We do have on our system today renewable generation from an existing facility, but we anticipate there may be more rules, or certainly we want to be understanding of what is taking place in the market today with renewable generation.

The legislative committee -- the legislature had a study committee on offshore wind, or clean energy -- coastal -- clean coastal energy. We participated and had staff people participate in that study, to see what that would mean. While it

may mean still-expensive power relative to power that we are able to produce today, there may be able to wrap around that a lot of economic development that may benefit the State of South Carolina. So there's not yet a business case, business model, but we are very much involved in what possibilities may occur.

In terms of biomass projects, we see projects presented to us that are 50 kW all the way to 50 megawatts. And while the economics don't appear today, we have to be aware of how that industry, how that technology, how that possibility of biomass may evolve, if standards become a rule that we have to follow.

We also are looking at co-firing some of our existing plants with biomass. We have a piece of equipment that we plan to use later this year that can inject, into the furnace, biomass chips. And we don't have a target, we don't know the economics, but we are studying to see what potential that may bring for adding some biomass to the generation in our existing plants.

And solar, while the cost per watt of solar panels are coming down, it still hasn't found a clearing point on our system. But there are some

other related solar technologies, and we continue to evaluate those and still have discussions. What we do have in solar are 30 or more customers that have their own generators, on-site customer generators -- these are small, relatively small residential and commercial customers -- with maybe half of them participating in the form of net metering, that is displacing load they would have taken from SCE&G, or another half that are connected to our grid and delivering their energy, and also getting a financial incentive from Palmetto Clean Energy, the PaCE program.

[Ref: PowerPoint Slide 24]

I wanted to add a little color as we sort of get to the end of our formal slides. Our graphics arts folks didn't want us to park the car in a lot and have a chance of losing it or not being able to find it, so we can always find the car when we return to it.

But we continue to study, to get data from the car that we converted from a Toyota Prius into a plug-in hybrid car, to see how consumers will behave in their driving, how often they'll charge, recharge, and some of the consumer habits.

We also were successful, with a coalition,

Plug In Carolina Coalition, in getting grant money so that the City of Columbia and the City of Charleston each could get six recharging stations to be placed in their municipal parking areas. This is to understand how consumers will behave when wanting to charge what appears to be a growing demand for electric transportation.

One statistic I saw was that each household -- I think it's South Carolina -- each household has about 2.4 cars. When I was raising my children, we had many more, but 2.4 cars, and we have over 1/2 million residential customers. It's not just math, but if you have a million cars and you have a penetration or market able to reach a portion of those, we have to begin to think what impact that will have on our system. Now, if we can send the right pricing signal, the right education information, to customers to charge off-peak, we have plenty of energy. If customers practice a habit of range anxiety -- I'm going to get in and I'm going to travel, but I want to be sure I get back, and I don't care what time it is, I can plug it in and there's no penalty for plugging it in, and I want a fast charge -- we may have to go back to Joe's demand forecast and adjust what may occur

at peak. But an interesting technology. There are many more to talk about, but a little color as we get to the end.

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So the summary I would offer about our supply side is we have tremendous flexibility, especially in this next five or six years as we lead to the point of our nuclear generation being added to our system. A greater portion of what we deliver will be from clean, non-emitting resources. We continue to track and monitor what's going on at the renewable market. We don't ignore it and we don't have barriers built up against it. We're still guided by economical, reliable, compliant energy for our customers.

There will be less emissions in the future. And while I don't know the laws that may be coming, I know we need to be flexible and be prepared to deal with them when they do. In any case, we'll have a greater -- we will have mitigated some of the cost that could be layered on our customers by the technologies of -- clean technologies that we have committed to already.

Joe and I may have stimu- -- may have caused you to have some comments back to us, or questions.

We'll be glad to respond to any that you have.

CHAIRMAN FLEMING: Okay, thank you. Commissioners. Commissioner Wright.

COMMISSIONER WRIGHT: Good morning. I was looking in the IRP -- it's on page A-6 -- where you're talking about the 4.4 percent loss, I think, in territorial sales. And it is my question for that, is that an industry -- is that near an industry average? Is it above or below it? Or how does that relate to like a typical utility around the country, is it comparable?

MR. LONG: You want to speak to that?

DR. LYNCH: Losses on the system, transmission losses? I don't really know. I know ours for years have been in that range. A little bit higher, little bit lower, but always around the 4 percent.

COMMISSIONER WRIGHT: But you don't know how that relates to other utilities, or --

DR. LYNCH: Other utilities, I don't.

COMMISSIONER WRIGHT: All right. And I guess on transmission, I was thinking about the NERC reliability standards and the reporting requirements and all that stuff that goes with it. How does that compliance with the NERC standards

and stuff, does it -- how does it impact transmission planning and operations? Can you address that for me? Or is that something that you're able to?

DR. LYNCH: Well, we have a committee -- our transmission department has an ERO committee that sort of manages the process. I'm sort of on the fringes of it, but I know they meet regularly, they do internal audits in preparation for NERC audits. I think it has a big impact on the company. There's a lot of paperwork and proving that you're doing things and that sort of thing. So it's a big effort at the company to make sure, you know, that we're in compliance.

COMMISSIONER WRIGHT: How does that impact any of the planning that you're doing here, that you -- basically in your presentations today?

DR. LYNCH: Well, maybe that's why I don't have all the -- in terms of resource planning, it doesn't impact it at all. Where it would impact potentially in the future is, if SERC or NERC or FERC decided that there's a certain reserve margin criteria that everybody has to meet, you know, that would certainly impact our resource plan. But right now, I think we've decided 12 to 18 percent;

the Commission has been accepting of our guidance, and, you know -- but I try to keep up to date with what FERC is doing, because I worry about that.

COMMISSIONER WRIGHT: So I guess in the territorial sales or loss, or, you know, the system losses or whatever like that, that's all kind of part -- you just pick -- that's a number, I guess, that you're just comfortable with, based on historical averages for SCE&G?

DR. LYNCH: Well, yeah. And we're certain of the number because we know how much is generating, and we know how much hit the meters, so you can do the arithmetic and say, "Well, there's the losses, the unaccounted-for piece." And we run studies to measure it, and we use it in all our studies.

COMMISSIONER WRIGHT: Right.

DR. LYNCH: And I guess that -- I haven't given it much thought.

COMMISSIONER WRIGHT: Okay, thank you.

CHAIRMAN FLEMING: All right. Thanks. Commissioner Mitchell.

COMMISSIONER MITCHELL: Thank you, Madam Chairman.

Mr. Long, you refer to regional transmission, and I want to take a look at that planning process.

And we know here in South Carolina we have a joint effort with South Carolina Electric & Gas and Santee Cooper, which is very good and seems to be working real well. How would that compare with the collaborative that might be undertaken in North Carolina as far as their transmission plan? Could you just give me a comparison of how they do it and how we do it?

MR. LONG: I regret that we couldn't convince our transmission planner to join us today. He had to be out of town. But on the transmission, Clay Young is very involved in the transmission studies. I can't answer directly what North Carolina is doing, but it is an integrated process.

The reference I made to reliability and the interconnection was primarily to our VACAR, were we have to have spinning reserves, so that the system can call on neighbors and others at any moment. And we have our lines packed and our lines loaded with reserves that they can call on at any time.

COMMISSIONER MITCHELL: But would you agree with me that they might have an independent third-party facilitator that might ensure -- or could ensure the interests of the stakeholders, and maybe represent the public in a different contrast with

the way we do it here in South Carolina? Or are you aware or that?

MR. LONG: Do you have an answer?

DR. LYNCH: Are you thinking of that Eastern Interconnection Collaborative?

COMMISSIONER MITCHELL: Right. Right, that's what -- that collaborative.

DR. LYNCH: Yeah. Well, I spoke to our transmission people about that. We are signatories to that agreement, so SCE&G transmission is part of it.

COMMISSIONER MITCHELL: Right.

DR. LYNCH: And as I understand it, the purpose of the collaborative was to actually measure the transmission costs and what equipment would be needed when -- if there was a federal mandate for renewable power, for example. Or even if a state required a certain amount of renewable power. The vision that we had was wind coming from the Midwest, having to come to South Carolina, something like that. There would be consequences on the transmission system, not only SCE&G's but a lot of the systems in between. And the purpose of the collaborative was to have a sort of an independent -- it would be the transmission owners

doing the studies, and they were supposed to be independent and indifferent to the results, but to actually measure them. So if DOE, for examples, wants to move all this wind to the East, this collaborative would measure the cost, presumably.

COMMISSIONER MITCHELL: Right.

DR. LYNCH: Yeah. And that is certainly -- at SCE&G right now, we worry about our own system. We do regional studies, and that's what we mention in the IRP, that we work with all the companies in VACAR and even beyond that, PJM and MISO and AEP, so the whole -- you know, a big region, we look at contingencies that would impact the transmission, everybody's transmission systems, and we run those studies all the time. Plus a lot of studies just on SCE&G's system, because we worry about our own business. So we do all of that, but those studies, we don't anticipate bringing wind --

COMMISSIONER MITCHELL: Absolutely, and I just brought it up, just to show the contrast, and apparently it seems to be working very well, your all's coalition with Santee Cooper and the way it's working here in South Carolina. However, I just wanted to make sure that you were aware of this other process --

DR. LYNCH: Oh, yes.

COMMISSIONER MITCHELL: -- and that you -- we have to always try to remember all the other people involved, and ideas involved, when we present something like this. But I want to commend you all on the effort that's been done so far. It seems to be working really well for South Carolina.

DR. LYNCH: Thank you.

COMMISSIONER MITCHELL: Thank you.

CHAIRMAN FLEMING: Are there -- Commissioner Howard.

VICE CHAIRMAN HOWARD: A couple of questions. On your slide, Mr. Long, I think you had hydro as -- nameplate capacity was like 14 percent, nameplate capacity on hydro. However, you used it as only 3 to 4 percent. To me, hydro is a cheap base-load type of generation. Why is it that the nameplate capacity is so much higher than you're using, or your usage is so much lower than your nameplate capacity?

MR. LONG: Well, part of the nameplate is going to include the Fairfield Pumped Storage, so that's going to make that percentage larger, and then based on the utilization when we're bringing water down, it's not going to be like a base-load

unit, so the percentage is going to be smaller. The run-of-river plants are relatively small compared to Fairfield, and then we certainly have Saluda, which we have several hundred megawatts of nameplate but utilization is not all that great.

VICE CHAIRMAN HOWARD: Okay. There's always conversation about the impending mercury emission control. With the present scrubbers you've just installed, according to you, I guess at Williams and Wateree, what effect would mercury emission control have on you? Would they be able to eliminate most of the mercury, or how would that be handled and at what cost?

DR. LYNCH: Well --

MR. LONG: Go ahead.

DR. LYNCH: Yeah. We know the scrubbers are going to eliminate most of the mercury. I don't know the percentage; it may be 60 percent. I'm not sure our engineers know, either. But that's no guarantee that will comply with the regulations, because if the regulation is maximum achievable control technology, that MACT standard, it may require something else. And we've talked to the engineers about it, and I think they -- before they solve the problem, they're waiting to see what the

problem is, you know, what the regulations are going to be. Hopefully, everybody is hoping that the scrubbers, which eliminate a lot, would be sufficient to meet the regulations.

VICE CHAIRMAN HOWARD: Okay. Yeah, I guess we're all waiting to see what that'll be costwise. Using your low-load scenario, you've got an extremely high reserve margin from the years 2013 through 2020. They're all in the 20 -- 22.8, et cetera. Do you all actively market wholesale agreements during that time, or do you have to sort of balance your low-load/high-load scenario? How do you handle that much reserve margin or how can you justify it?

DR. LYNCH: Well, if we go down that path, because we have the existing capacity, you could mothball or retire -- depending on regulations and so forth. But we do have a power marketing group that does look for opportunities to sell, if we have it, if it's economical, if it helps the system, you know, in our retail customer base. So we would certainly do that, if we could.

VICE CHAIRMAN HOWARD: Okay.

MR. LONG: Part of that would be, would low load be just affecting our system as something

unique to us, or would it be low load as affects the regional system. That would maybe help determine what the marketability of any excess capacity would be.

VICE CHAIRMAN HOWARD: True, it could. Well, I've got to ask this, being from the Lowcountry. Just in the big picture, what impact does the Boeing Company in Charleston, Boeing manufacturing plant, have on your load and your transmission, if that's significant or not?

DR. LYNCH: Transmission isn't significant. The capacity, I think it's like seven or eight megawatts, in that range. We're hoping that there'll be a lot of other plants supplying Boeing, because I heard on the news the other day maybe 20, 30 different suppliers that show up on the system to supply them. So we're hoping that that will grow into --

VICE CHAIRMAN HOWARD: But it wouldn't affect your transmission? It wouldn't affect the transmission?

DR. LYNCH: Not -- no, I don't believe so.

VICE CHAIRMAN HOWARD: Okay, thank you both very much. I've enjoyed it.

CHAIRMAN FLEMING: Are there any questions?

[No response]

Well, I'd like to get your -- talk a little bit about -- there's been a lot of discussion about regional nuclear plants. And I just wondered if SCE&G has discussed this, and exactly what your, I guess, opinion of that is, at this time.

MR. LONG: We have -- we put together the integrated resource plan around the customers we serve, and our customers' needs. We've identified the regional -- we've identified the capacity and the generation that's needed for our customers. And the term "regional" probably means further than just our relationship with Santee Cooper and the partnership.

CHAIRMAN FLEMING: Right.

MR. LONG: And I guess it has -- it may have potential, but our focus has been on our customers and what they need. And I don't know much more than -- I'm not aware of any firsthand information about discussions about the regional planning for nuclear generators beyond the ones that we've shown in our plan.

CHAIRMAN FLEMING: In the Southeast.

MR. LONG: That's right.

CHAIRMAN FLEMING: Okay, thank you. Are there

any more questions?

[No response]

All right. Well, this has been very informative, and I really appreciate your being here today. Mr. Burgess, do you --

MR. BURGESS: Madam Chairman, I would just like to thank the Commission for your time and the questions you've asked of us, and we appreciate being here today. Thank you.

CHAIRMAN FLEMING: All right, thank you.

MR. LONG: Thank you.

CHAIRMAN FLEMING: This briefing is now adjourned.

[WHEREUPON, at 11:35 a.m., the proceedings in the above-entitled matter were adjourned.]

C E R T I F I C A T E

I, Jo Elizabeth M. Wheat, CVR-CM-GNSC, do hereby certify that the foregoing is, to the best of my skill and ability, a true and correct transcript of all the proceedings had in an allowable ex parte briefing held in the above-captioned matter before the Public Service Commission of South Carolina.

Given under my hand, this the 15th day of April, 2010.

Jo Elizabeth M. Wheat, CVR-CM-GNSC

ATTEST:

Jocelyn G. Boyd

INTERIM CHIEF CLERK/ADMINISTRATOR